## 1-8. (CANCELED)

9. (CURRENTLY AMENDED) A method for <u>optimizing a kick-down upshift point</u> speed <del>optimization</del> in a motor vehicle with an automatic transmission, comprising

0

**0** 

00

00

**4**=

**4**=

4

0

determining each kick-down upswitch point as a function of <u>at least one of a</u> [[the]] load condition[[s]] and <u>a</u> road inclination <u>as represented by a gradient of one of an engine output speed and a transmission output speed.</u>

- 10. (CURRENTLY AMENDED) The method according to claim 9, comprising adding a speed offset of appropriate sign (nd\_abkd) to the current upshift point as a function of [[the]] <u>an</u> output speed gradient (ng\_ab) when a kick-down condition is recognized by a transmission control system of the transmission.
- 11. (CURRENTLY AMENDED) The method according to claim 10, comprising storing the variation of the speed offset of appropriate sign (nd\_abkd) is stored in [[the]] a transmission control system in the form of a characteristic line a separate characteristic line being stored for each upshift.
- 12. (PREVIOUSLY PRESENTED) The method according to claim 10, comprising using an absolute kick-down switching characteristic line for the determination of the kick-down upshift point.
- 13. (CURRENTLY AMENDED) The method according to claim 10, comprising determining [[the]] <u>a</u> target gear for the next <del>upswitch</del> <u>upshift</u> when a kick-down condition is recognized and determining the transmission output speed gradient (ng\_ab) and then calculating the speed offset (nd\_abkd), [[the]] delay times for individual gear changes being stored for application with temperature-dependent delay times being taken into account.
- 14. (CURRENTLY AMENDED) The method according to claim 10, comprising calculating the value of the speed offset (nd\_abkd) and then recalculating this value as a function of [[the]] an existing driver behavior, whereby [[the]] an upshift speed (n\_abkd) is adapted to [[the]] a driver's way of driving.
- 15. (CURRENTLY AMENDED) <u>A method for kick-down upshift speed</u> optimization in a motor vehicle with an automatic transmission, comprising:

determining each kick-down upshift point as a function of an acceleration determined by a load condition and road inclination.

adding a speed offset of appropriate sign (nd\_abkd) to the current upshift point as a function of an output speed gradient (ng\_ab) when a kick-down condition is recognized by a transmission control system of the transmission, by

## 10/782,046

**-**

**~**=

calculating	2	firet	value	of	the	baara	offeat	(nd	ahkd)
Calculating	а	11151	value	UI	uie	Speeu	OHSEL	(Hu	aunu),

recalculating the first value of the speed offset (nd abkd) as an intermediate value of the speed offset as a function of an existing driver behavior, whereby an upshift speed (n\_abkd) is adapted to a driver's way of driving, and

The method according to claim 14, comprising again recalculating the intermediate value of the speed offset (nd\_abkd) as a final value of the speed offset as a function of driver activity by multiplying a characteristic line of the speed offset values (nd\_abkd) by a factor that depends on driver behavior.

- 16. (CURRENTLY AMENDED) The method according to claim 14, comprising recalculating determining the value of the speed offset (nd\_abkd) as a function of driver activity by establishing characteristic lines of the speed offset values for each characteristic type of driver, intermediate values being determined by averaging between the driver types.
- 17. (CURRENTLY AMENDED) A method for a kick-down upshift speed optimization in a motor vehicle with an automatic transmission as a function of road inclination, comprising the steps of:

determining an output speed gradient (ng-ab) reflecting a road inclination[[,]]

determining a speed offset (nd-abkd) dependent upon the output speed gradient (ng-ab), and

applying the speed offset (nd-abkd) as an adjustment to the upshift point speed such that [[an]] the engine will reach a maximum engine output speed at an upshift point.

- 18. (PREVIOUSLY PRESENTED) The method of claim 17, further comprising the step of further determining the output speed gradient (ng0ab) and the speed offset (nd-abkd) based upon a vehicle load condition which is derived from one of a corresponding curve and value stored in a transmission control system.
- 19. (PREVIOUSLY PRESENTED) A method for kick-down upshift speed optimization in a motor vehicle with an automatic transmission as a function of road inclination, comprising the steps of:

determining an output speed gradient (ng-ab) reflecting a road inclination,

## 10/782,046

determining a speed offset (nd-abkd), dependent upon the output speed gradient (ng-ab), such that an engine will reach a maximum engine output speed at an upshift point, and

altering the upshift speed according to the speed offset (nd-abkd) so that the upshift occurs at a time the engine output speed reaches the maximum engine output speed.

20. (PREVIOUSLY PRESENTED) The method of claim 19, further comprising the step of further determining the output speed gradient (ng-ab) and the speed offset (nd-abkd) based upon a vehicle load condition which is derived from one of a corresponding curve and value stored in a transmission control system.